Crop Protection

Index to Volume 15 (1996)

Number 1 (February) pp 1–112
Number 2 (March) pp 113–220
Number 3 (May) pp 221–324
Number 4 (June) pp 325–404
Number 5 (August) pp 405–494
Number 6 (September) pp 495–600
Number 7 (November) pp 601–672
Number 8 (December) pp 673–800

Article Index

Number 1 (February)

Seasonal abundance of chrysopids (Neuroptera: Chrysopidae) preying on *Helicoverpa armigera* (Hubner) (Lepidoptera: Noctuidae) and *Aphis gossypii* (Glover) (Homoptera: Aphididae) on cotton in eastern Tanzania
J.C.B. Kabissa, H.Y. Kayumbo and J.G. Yarro 5

The effects of azadirachtin on the acquisition and inoculation of potato leafroll virus by *Myzus persicae*
A.J. Nisbet, J.A.T. Woodford and R.H.C. Strang 9

Effects of watering frequency, shade and glyphosate application on *Paspalum conjugatum* Berg (sour grass)
I.B. Sahid, R.B. Ibrahim and S. Kadri 15

Chemical weed control in garlic (*Allium sativum* L.) in Jordan
J.R. Qasem 21

Residues of difenoconazole and penconazole on apple leaves and grass and soil in an apple orchard in north-eastern Switzerland
J. Rueegg and W. Siegfried 27

Formulation of grasshopper and locust entomopathogens in baits using starch extrusion technology
R.W. Caudwell and A.G. Gatehouse 33

Factors influencing activity of triazole fungicides towards *Botrytis cinerea*
C. Stehmann and M.A. de Waard 39

Controlling powdery mildew caused by *Sphaerotheca fuliginea* in cucumber by foliar sprays of phosphate and potassium salts
M. Reuveni, V. Agapov and R. Reuveni 49

Henbit (*Lamium amplexicaule* L.) control and forage legume tolerance to selected postemergence herbicides
W.J. Grichar, G.W. Evers, B.A. Besler and A.J. Jaks 55

Estimation of economic thresholds for weed control in soybean (*Glycine max* (L.) Merr.)
I. Sartorato, A. Berti and G. Zanin 63

Factors influencing the relative susceptibility of wheat cultivars (*Triticum aestivum* L.) to blackpoint
S.A. Ellis, M.J. Gooding and A.J. Thompson 69

Cinnamic acid derivatives: novel repellent seed dressings for the protection of wheat seed against damage by the field slug, *Deroceras reticulatum*
R.W. Watkins, H.J. Mosson, J.E. Gurney, D.P. Cowan and J.P. Edwards 77

Recovery of *Pythium arrhenomanes* and its virulence to corn
I.W. Deep and P.E. Lipps 85

The effect of propiconazole on foliar fungal diseases, herbage yield and quality of perennial ryegrass
G.C. Lewis, R.H. Lavender and T.M. Martyn 91

Grazing repellency of methyl anthranilate to snow geese is enhanced by a visual cue
J. R. Mason and L. Clark 97

Relationship between different resistance parameters in french bean to floury leaf spot caused by *Mycovellosiella phaseoli* (Drummond) Deighton
K.D. Sharma, R.P. Kaushal and B.M. Singh 101

Number 2 (March)

Interaction of biocontrol fungi with sublethal rates of metham sodium for control of *Verticillium dahliae*
D.R. Fravel 115

Suitability of graminaceous weed species as host plants for rice leaffolders, *Cnaphalocrocis medinalis* and *Marasmia patnalis*
Z.R. Khan, M.L.P. Abenes and N.J. Fernandez 121

Plant hormesis induced by ultraviolet light-C for controlling postharvest diseases of tree fruits
C. Stevens, C.L. Wilson, J.Y. Lu, V.A. Khan, E. Chalutz, S. Droby, M.K. Kabwe, Z. Haung, O. Adeyeye, L.P. Pusey, M.E. Wisniewski and M. West 129

Relationships between defoliation, canopy reflectance and pod yield in the peanut-late leafspot pathosystem
F.W. Nutter, Jr. and R.H. Littrell 135

Study of house sparrow (*Passer domesticus*) feeding preference to natural color and guard coat blue coated seeds
I.M. Pawlina and G. Proulx 143

A comparison of the drift potential of a novel twin fluid nozzle with conventional low volume flat fan nozzles when using a range of adjuvants
J.H. Combellack, N.M. Western and R.G. Richardson 147

Model-based improvement of spray distribution by optimal positioning of spray nozzles
H. Ramon and J. Langenakens 153

Screening grain sorghums for bird tolerance and nutritional quality
R.W. Bullard and J.O. York 159

Disease control and yield improvement obtained with fungicide applications to spring wheat in South Africa
D.B. Scott 167

Effect of crop rotations on weed control, *Bidens cernua* and *Erigeron canadensis* populations, and carrot yields in organic soils
G.D. Leroux, D.-L. Benoît and S. Banville 171

A survey of cropping practices and foliar diseases of common beans in Ethiopia
A. Habtu, I. Sache and J.C. Zadoks 179
Use of nematicides to produce yam planting material free of *Scutellonema bradys* in Martinique (French West Indies)
P. Cadet and P. Daly 187
Studies on the use of chemicals, botanicals and *Bacillus thuringiensis* in the management of the potato tuber moth in potato stores
J. Kroschel and W. Koch 197
Timing the removal of weeds from drilled salad onions to prevent crop losses
W. Bond and S. Burston 205

Number 3 (May)

An overview of the influence of sustainable agricultural systems on plant diseases
K.E. Conway 223
Biological control of *Botrytis*-incited diseases and powdery mildews in greenhouse crops
Y. Elad, N.E. Malathrakis and A.J. Dik 229
Comparison of the efficacy of chemical control and *Helicoverpa* NPV for the management of *Helicoverpa armigera* (Hübner) on resistant and susceptible chickpea
S.E. Cowgill and V.R. Bhagwat 241
Toxicity of cholecalciferol pelleted baits to the field rodents *Microtus guentheri* and *Meriones tristrami*
S. Moran 247
An evaluation of two field samplers for monitoring spray drift
J.F. Cooper, D.N. Smith and H.M. Dobson 249
Prediction of field use by brent geese; an aid to management
H.V. M^{c}Kay, S.D. Langton, T.P. Milsom and C.J. Feare 259
Establishment of a bioassay for testing control measures against crown rot of banana
U. Krauss 269
Uptake and distribution in germinating wheat of [^{14}C]SAN 789 F and [^{14}C]cyproconazole applied as seed treatment
U. Simmen and U. Gisi 275
Estimating resistance to methomyl in the tomato pinworm (Lepidoptera: Gelechiidae) using a pheromone trap bioassay
D.J. Schuster, M.J. Brewer, B. Alvarado-Rodriguez, K.A. Sorensen and J.T. Trumble 283
Evaluation of material from plants of medicinal importance in Malawi as protectants of stored grain against insects
C.M. Chimbe and D.J. Galley 289
Influence of cropping system on foot rot of winter wheat in France
N. Colbach, N. Maurin and P. Huet 295
DRC-1339 avicide fails to protect ripening sunflowers
G.M. Linz and D.L. Bergman 307
Resistance in maize hybrids and inbreds to first-generation southwestern corn borer, *Diatraea grandiosella* (Dyar) and sugarcane borer, *Diatraea saccharalis* Fabricius
H. Kumar and J.A. Mihm 311

Number 4 (June)

Farmers' perceptions of the white stem borer *Scirpophaga innotata* (Walker), in Cilamaya, West Java, Indonesia
E.G. Rubia, A.A. Lazaro, K.L. Heong, Diah, Nurhasyim and G.A. Norton 327
Mechanisms of compensation of rice plants to yellow stem borer *Scirpophaga incertulas* (Walker) injury
E.G. Rubia, K.L. Heong, M. Zalucki, B. Gonzales and G.A. Norton 335
The use of MR formulation as a novel and environmentally safe photodynamic fungicide for the control of powdery mildews
D.D.-S. Tzeng, H.C. Tzeng, R.-S. Chen, A.-H. Cheng, C.C. Tsai, C.-W. Chen, T.-C. Hwang, Y. Yeh and J.E. DeVay 341
The performance of phorate against the carrot fly (*Psila rosae* (F.)) in trials done during a 15 year period on carrots in mineral soil
G.H. Edmonds 349
A review of work done to forecast pest insect attacks in UK horticultural crops
S. Finch, R.H. Collier and K. Phelps 353
Risk assessment for rice planthopper and tungro disease outbreaks
J. Holt, T.C.B. Chancellor, D.R. Reynolds and E.R. Tiongco 359
The importance of scouting in cotton IPM
G.A. Matthews 369
A new sampling method for the detection of low population densities of potato cyst nematodes (*Globodera pallida* and *G. rostochiensis*)
T.H. Been and C.H. Schomaker 375
Monitoring diseases of winter wheat on both a field and a national level in Denmark
L.N. Jørgensen, B.J.M. Secher and G.C. Nielsen 383
Monitoring in banana pest management
M.J. Jeger, J.M. Waller, A. Johanson and S.R. Gowen 391

Number 5 (August)

Incorporating spatial pattern of harmful organisms into crop loss models
G. Hughes 407
Control of soilborne pathogens of watermelon by solar heating
B. Mansoori and N.KH. Jaliani 423
Spray deposits in a mature oak canopy from aerial applications of nuclear polyhedrosis virus and *Bacillus thuringiensis* to control gypsy moth, *Lymantria dispar* (L.)
N.J. Payne, J.C. Cunningham, R.D. Curry, K.W. Brown and R.E. Mickle 425
Crambe and rapeseed meal as soil amendments: nematicidal potential and phytotoxic effects
J.T. Walker 433
The within-field dynamics of rice tungro disease in relation to the abundance of its major leafhopper vectors
T.C.B. Chancellor, A.G. Cook and K.L. Heong 439
Phytotoxicity of insecticides used to control aphids on Sitka spruce, *Picea sitchensis* (Bong.) Carr.
N.A. Straw, N.J. Fielding and A. Waters 451
Mint plant derivatives as blackbird feeding deterrents
M.L. Avery, D.G. Decker, J.S. Humphrey and C.C. Laukert 461
Timing insecticide applications for managing European corn borer (Lepidoptera: Pyralidae) infestations in potato
B.A. Nault and G.G. Kennedy 465
Economics of employing pheromones for mating disruption of the codling moth, *Carpocapsa pomonella*
E.R. Williamson, R.J. Folwell, A. Knight and J.F. Howell 473
Selection of rhizobacteria for the control of *Pythium ultimum* and *Aphanomyces cochlioides* on sugar-beet seedlings
G.E. Williams and M.J.C. Asher 479

Number 6 (September)

Role of root colonization ability of plant growth promoting fungi in the suppression of take-all and common root rot of wheat
M.B. Shivanna, M.S. Meera and M. Hyakumachi 497
Control of Childers canegrub (*Antitrogus parvulus* Britton) in Australian sugarcane with a controlled-release formulation of chlorpyrifos (suSCon® Blue) and the effects of infestations on yield
P.G. Allsopp, N.G. McGill and J.K. Stringer 505
Tests of fungicides for post-germination activity against *Nectria galligena*,

causal agent of canker and fruit rot of apple
X. Xu and D.J. Butt 513
The development of baiting techniques to detect wireworms (*Agriotes* spp., Coleoptera: Elateridae) in the field, and the relationship between bait-trap catches and wireworm damage to potato
W.E. Parker 521
Basis for use strategies of anilinopyrimidine and phenylpyrrole fungicides against *Botrytis cinerea*
B. Forster and T. Staub 529
The role and value of herbicide-resistant lupins in Western Australian agriculture
C.P. Schmidt and D.J. Pannell 539
Control of *Fusarium oxysporum* f.sp. *narcissi*, the cause of narcissus basal rot, with thiabendazole and other fungicides
G.R. Hanks 549
A degree-day model for regional prediction of first occurrence of frit flies in oats in Sweden
M. Lindblad and R. Sigvald 559
Application technology for entomopathogenic nematodes against foliar pests
E.R. Lello, M.N. Patel, G.A. Matthews and D.J. Wright 567
Evaluation of propane exploders as white-tailed deer deterrents
J.L. Belant, T.W. Seamans and C.P. Dwyer 575
Sprayed barriers of diflubenzuron for control of the migratory locust (*Locusta migratoria capito* (Sauss.)) [Orthoptera: Acrididae] in Madagascar: short-term impact on relative abundance of terrestrial non-target invertebrates
C.C.D. Tingle 579

Number 7 (November)

Suppression of seed bruchid (*Callosobruchus maculatus* F.) development and damage on cowpea (*Vigna unguiculata* (L.) Walp.) with *Zanthoxylum zanthoxyloides* (Lam.) Waterm. (Rutaceae) root bark powder when compared to neem seed powder and pirimiphos-methyl
E.O. Ogunwolu and A.T. Odunlami 603
Season and plant age effect evaluation of plantain for response to black sigatoka disease
K.N. Mobambo, F. Gauhl, C. Pasberg-Gauhl and K. Zuofa 609
Sensitivity of *Trichoderma* isolates and selected resistant mutants to DMI fungicides
M. Figueras-Roca, C. Cristani and G. Vannacci 615
Plant disease incidence: inverse sampling, sequential sampling, and confidence intervals when observed mean incidence is zero
L.V. Madden, G. Hughes and G.P. Munkvold 621
Biocontrol of brown blotch of cowpea caused by *Colletotrichum truncatum* with *Trichoderma viride*
S.A. Bankole and A. Adebanjo 633
Further field evaluation of the effects of repeated foliar sprays of insecticides or fungicides alone and in admixture on an organophosphate-resistant strain of the orchard predatory mite *Typhlodromus pyri* on apple
J.V. Cross and A.M. Berrie 637
Interplanting ryegrass in winter leek: effect on weed control, crop yield and allocation of N-fertiliser
H. Müller-Schärer 641
Scirpophaga incertulas (Walker) (Lepidoptera: Pyralidae) and deepwater rice — an integrated view
B. Taylor 649
Suppression of *Bemisia tabaci* (Homoptera: Aleyrodidae) infestations in cantaloupe and cotton with sprinkler irrigation
S.J. Castle, T.J. Henneberry and N.C. Toscano 657

Number 8 (December)

The use of an aspirated sieve to remove insects, mites and pesticides from grain
D.M. Armitage, D.A. Cook and C. Duckett 675
Fumigation of stonefruit with acetic acid to control postharvest decay
P.L. Sholberg and A.P. Gaunce 681
Insecticidal control of cereal aphids and its impact on the epidemiology of the barley yellow dwarf luteoviruses
S.M. Gray, G.C. Bergstrom, R. Vaughan, D.M. Smith and D.W. Kalb 687
Postharvest biological control of grey mould (*Botrytis cinerea* Pers.: Fr.) on fresh-market tomatoes with *Bacillus amyloliquefaciens*)
M. Mari, M. Guizzardi, M. Brunelli and A. Folchi 699
Efficacy of different formulations of pirimiphos-methyl and etrimfos when admixed with oilseed rape, against susceptible storage insect and mite species
D.A. Collins and T.J. Binns 707
Development of a formulation of *Pseudomonas fluorescens* PfALR2 for management of rice sheath blight
R. Rabindran and P. Vidhyasekaran 715
Response of European starlings to menthone derivatives: evidence for stereochemical differences in repellency
J.R. Mason and T. Primus 723
Efficacy of zinc phosphide baits to control voles in alfalfa — an enclosure study
R.T. Sterner, C.A. Ramey, W.D. Edge, T. Manning, J.O. Wolff and K.A. Fagerstone 727
Efficacy of biocontrol agents in planting mixes to colonize plant roots and control root diseases of vegetables and citrus
S. Nemec, L.E. Datnoff and J. Strandberg 735
Witches' broom disease of cocoa in Bahia: attempts at eradication and containment
J.L. Pereira, L.C.C. de Almeida and S.M. Santos 743
Resistance to the legume pod borer, *Maruca vitrata* Fabricius, and the probable modalities involved in wild *Vigna*
L.E.N. Jackai, S. Padulosi, and Q. Ng 753
Management of insect pests in celery and potato crops by pneumatic removal
P.G. Weintraub, Y. Arazi and A.R. Horowitz 763
Fitness of isolates of *Erysiphe graminis* f.sp. *tritici* with reduced sensitivity to fenpropimorph
A.J.G. Engels and M.A. de Waard 771
Economic injury levels for *Bemisia tabaci* (Homoptera: Aleyrodidae) in cotton: impact of crop price, control costs, and efficacy of control
S.E. Naranjo, C.-C. Chu and T.J. Henneberry 779

Author index

Abenes, M. L. P. 121
Adebanjo, A. 633
Adeyeye, O. 129
Agapov, V. 49
Allsopp, P. G. 505
Alvarado-Rodriguez, B. 283
Arazi, Y. 763
Armitage, D. M. 675
Asher, M. J. C. 479
Avery, M. L. 461
Bankole, S. A. 633
Banville, S. 171
Been, T. H. 375
Belant, J. L. 575
Benoît, D.-L. 171

Bergman, D. L. 307
Bergstrom, G. C. 687
Berrie, A. M. 637
Berti, A. 63
Besler, B. A. 55
Bhagwat, V. R. 241
Binns, T. J. 707
Bond, W. 205
Brewer, M. J. 283
Brown, K. W. 425
Brunelli, M. 699
Bullard, R. W. 159
Burston, S. 205
Butt, D. J. 513

Cadet, P. 187
Castle, S. J. 657
Caudwell, R. W. 33
Chalutz, E. 129
Chancellor, T. C. B. 359, 439
Chang-Chi Chu 779
Chen, C.-W. 341
Chen, R.-S. 341
Cheng, A.-H. 341
Chimbe, C. M. 289
Clark, L. 97
Colbach, N. 295
Collier, R. H. 353
Collins, D. A. 707
Combellack, J. H. 147
Conway, K. E. 223
Cook, A. G. 439
Cook, D. A. 675
Cooper, J. F. 249
Cowan, D. P. 77
Cowgill, S. E. 241
Cristani, C. 615
Cross, J. V. 637
Cunningham, J. C. 425
Curry, R. D. 425

Daly, P. 187
Datnoff, L. E. 735
de Almeida, L. C. C. 743
de Waard, M. A. 39, 771
Decker, D. G. 461
Deep, I. W. 85
De Vay, J. E. 341
Diah 327
Dik, A. J. 229
Dobson, H. M. 249
Droby, S. 129
Duckett, C. 675
Dwyer, C. P. 575

Edge, W. D. 727
Edmonds, G. H. 349
Edwards, J. P. 77
Elad, Y. 229
Ellis, S. A. 69
Engels, A. J. G. 771
Evers, G. W. 55

Fagerstone, K. A. 727
Feare, C. J. 259
Fernandez, N. J. 121
Fielding, N. J. 451
Figueras-Roca, M. 615
Finch, S. 353
Folchi, A. 699
Folwell, R. J. 473
Forster, B. 529
Fravel, D. R. 115

Galley, D. J. 289
Gatehouse, A. G. 33
Gauhl, F. 609
Gaunce, A. P. 681
Gisi, U. 275
Gonzales, B. 335
Gooding, M. J. 69
Gowen, S. R. 391
Gray, S. M. 687
Grichar, W. J. 55
Guizzardi, M. 699
Gurney, J. E. 77

Habtu, A. 179
Hanks, G. R. 549
Haung, Z. 129
Henneberry, T. J. 657, 779
Heong, K. L. 327, 335, 439
Holt, J. 359
Horowitz, A. R. 763
Howell, J. F. 473
Huet, P. 295
Hughes, G. 407, 621
Humphrey, J. S. 461
Hwang, T.-C. 341
Hyakumachi, M. 497

Ibrahim, R. B. 15

Jackai, L. E.N. 753
Jaks, A. J. 55
Jaliani, N. KH. 423
Jeger, M. J. 391
Jørgensen, L. N. 383
Johanson, A. 391

Kabissa, J. C. B. 5
Kabwe, M. K. 129
Kadri, S. 15
Kalb, D. W. 687
Kaushal, R. P. 101
Kayumbo, H. Y. 5
Kennedy, G. G. 465
Khan, V. A. 129
Khan, Z. R. 121
Knight, A. 473
Koch, W. 197
Krauss, U. 269
Kroschel, J. 197
Kumar, H. 311

Langenakens, J. 153
Langton, S. D. 259
Laukert, C. C. 461
Lavender, R. H. 91
Lazaro, A. A. 327
Lello, E. R. 567
Leroux, G. D. 171
Lewis, G. C. 91
Lindblad, M. 559
Linz, G. M. 307
Lipps, P. E. 85
Littrell, R. H. 135
Lu, J. Y. 129

Madden, L. V. 621
Malathrakis, N. E. 229
Manning, T. 727
Mansoori, B. 423
Mari, M. 699
Martyn, T. M. 91
Mason, J. R. 97, 723

Matthews, G. A. 369, 567
Maurin, N. 295
McGill, N. G. 505
M^{c}Kay, H. V. 259
Meera, M. S. 497
Mickle, R. E. 425
Mihm, J. A. 311
Milsom, T. P. 259
Mobambo, K. N. 609
Moran, S. 247
Mosson, H. J. 77
Müller-Schärer, H. 641
Munkvold, G. P. 621

Naranjo, S. E. 779
Nault, B. A. 465
Nemec, S. 735
Ng, Q. 753
Nielsen, G. C. 383
Nisbet, A. J. 9
Norton, G. A. 327, 335
Nurhasyim 327
Nutter, Jr, F. W. 135

Odunlami, A. T. 603
Ogunwolu, E. O. 603

Padulosi, S. 753
Pannell, D. J. 539
Parker, W. E. 521
Pasberg-Gauhl, C. 609
Patel, M. N. 567
Pawlina, I. M. 143
Payne, N. J. 425
Pereira, J. L. 743
Phelps, K. 353
Primus, T. 723
Proulx, G. 143
Pusey, L. P. 129

Qasem, J. R. 21

Rabindran, R. 715
Ramey, C. A. 727
Ramon, H. 153
Reuveni, M. 49
Reuveni, R. 49
Reynolds, D. R. 359
Richardson, R. G. 147
Rubia, E. G. 327, 335
Rueegg, J. 27

Sache, I. 179
Sahid, I. B. 15
Santos, S. M. 743
Sartorato, I. 63
Schmidt, C. P. 539
Schomaker, C. H. 375
Schuster, D. J. 283
Scott, D. B. 167
Seamans, T. W. 575
Secher, B. J. M. 383
Sharma, K. D. 101
Shivanna, M. B. 497
Sholberg, P. L. 681
Siegfried, W. 27
Sigvald, R. 559
Simmen, U. 275
Singh, B. M. 101
Smith, D. M. 687
Smith, D. N. 249
Sorensen, K. A. 283

Staub, T. 529
Stehmann, C. 39
Sterner, R. T. 727
Stevens, C. 129
Strandberg, J. 735
Strang, R. H. C. 9
Straw, N. A. 451
Stringer, J. K. 505

Taylor, B. 649
Thompson, A. J. 69
Tingle, C. C. D. 579
Tiongco, E. R. 359
Toscano, N. C. 657
Trumble, J. T. 283
Tsai, C. C. 341
Tzeng, D. D.-S. 341
Tzeng, H. C. 341

Vannacci, G. 615
Vaughan, R. 687
Vidhyasekaran, P. 715

Walker, J. T. 433
Waller, J. M. 391
Waters, A. 451
Watkins, R. W. 77
Weintraub, P. G. 763
West, M. 129
Western, N. M. 147
Williams, G. E. 479
Williamson, E. R. 473
Wilson, C. L. 129
Wisniewski, M. E. 129
Wolff, J. O. 727
Woodford, J. A. T. 9
Wright, D. J. 567

Xu, X. 513

Yarro, J. G. 5
Yeh, Y. 341
York, J. O. 159

Zadoks, J. C. 179
Zalucki, M. 335
Zanin, G. 63
Zuofa, K. 609

Keyword index

A. gossypii, 5
Aculus schlechtendalil, 637
Acute rodenticide, 727
Adjuvants, 147
Advisory system, 375
Aerial spray dispersal, 425
Agriotes, 521
Alfalfa pests, 727
Alternate hosts, 121
Alternative feeding areas, 259
Angular leaf spot, 179
Anilinopyrimidines, 529
Anthracnose, 179
Antitrogus parvulus, 505
Aphanomyces cochlioides, 479
Aphids, 763
Apple orchard, 27
Apricots, 681
Arachis hypogaea, 135
Australia, 505
Avicide, 307
Azadirachtin, 9

Bacillus, 735
Bacillus amyloliquefaciens, 699
Bacillus thuringiensis, 197, 425
Bacterial blight, 179
Bait effectiveness, 727
Baits, 33
Banana, 269
Banana disease, 391
Banana nematodes, 391
Banana pests, 391
Banana weevil, 391
Barrier spraying, 579
Basal rot (*Fusarium*), 549
Bemisia tabaci, 763
Bemisia tabaci Biotype B, 779
Bemisia argentifolii, 779
Beta-binomial distribution, 621
Bidens cernua L., 171
Binary power law, 621
Biocontrol, 5, 115, 433, 479, 633
Biological control, 115, 223, 229, 497, 699, 715
Bird damage, 159
Bird repellent, 461
Birds, 143, 159
Black sigatoka, 609
Blackbirds, 307, 461
Blackpoint, 69
Bollworms, 369
Botanicals, 197
Botrytis cinerea, 39, 229, 529, 699
Brent geese, 259
Brown rot, 681
Bruchids, 603
BYDV, 687

Carbaryl, 637
Carrot fly, 349
Carrot yield, 171
Cercosporidium personatum, 135
Chemical control, 241
Chen caerulescens, 97
Cherries, 681
Chlorpyrifos, 637
Cholecalciferol, 247
Chrysopids, 5
Cicer arietinum, 241
Cinnamamide, 77
Cleaning, 675
Cnaphalocrocis medinalis, 121
Cochliobolus sativus, 497
Cocoa, 743
Codling moth, 473
Colletotrichum, 269
Colletotrichum truncatum, 633
Compensation, 335
Compensatory growth, 407
Confidence intervals, 621
Control, 197, 247
Corn root rot, 85
Correspondence analysis, 179
Cotton, 5, 369
Cowpea, 633
Crop loss, 135, 649
Crop rotation, 223
Crop rotations, 171
Crop succession, 295
Crop suppression, 55
Cross resistance, 529
Crown rot, 269
Cultivars, 69
Curative treatment, 513

Damage, 97, 307, 521
Decision support system, 383
Deepwater rice, 649
Degree-day model, 559
Delia radicum, 353
Deroceras reticulatum, 77
Deterrent, 575
Development, 353
Diatraea grandiosella, 311
Diatraea saccharalis, 311
Dicoma, 289
Difenoconazole, 27
Diflubenzuron, 579
Disease, 407
Disease control, 49, 383
Disease suppression, 497
Disease survey, 383
DRC-1339, 307

Economic injury level, 779
Economic threshold, 63
Economics, 539
Entomopathogen, 33
Environmental safety, 341
Epidemiology, 621
Eradication, 743
Eradicative effects, 341
Erigeron canadensis L., 171
Erysiphaceae, 229
Erysiphe graminis f.sp. *tritici*, 771
Etrimfos, 707
Expert system, 359

Farmer surveys, 327
Feeding deterrent, 77
Fenpropimorph, 771
Fenvalerate, 197
Field choice, 259
Field monitoring, 383
Field performance, 39
Fitness, 771
Floury leaf spot, 179
Fluorescent pseudomonads, 715
Foliar disease, 167
Foliar fertilizers, 49
Foliar fungal diseases, 91
Food baits, 521
Food consumption, 121
Food preference, 121
Forecast, 353, 359
Forestry, 425

Formulation, 33
French bean, 101
Fumigation, 115
Fungicidal activity, 39
Fungicide, 69, 549
Fungicide control, 513
Fungicide sensitivity, 529, 771
Fungicide uptake, 275
Fungicides, 167
Fusarium solani, 423
Fusarium spp. winter wheat, 295

Gaeumannomyces graminis var. tritici, 497
Gaucho, 687
Genetic engineering, 539
Gliocladium, 735
Gliocladium roseum, 115
Glomus, 735
Glyphosate, 15
Goose, 97
Gossypium hirsutum, 779
Grain protectant, 289
Grain size, 69
Grasshoppers and locusts, 33
Grazing, 97
Greenhouse, 229
Grey mould, 229
Growth regulators, 197
Gypsy moth, 425

H. armigera, 5
Habitat preference, 259
Helicoverpa armigera, 241
Herbage yield, 91
Herbicide, 55
Herbicide resistance, 539
Herbicides, 21
Horizontal boom vibrations, 153
Hormesis, 129
Host-plant resistance, 241
House sparrow, 143
Husbandry, 69

Icterinae, 307
Imidacloprid, 657, 687
Indonesia, 327
Infectivity, 439
Infestation focus, 375
Insect, 353
Insecticide control, 465
Insecticide performance, 349
Insecticide resistance, 283
Insecticide sprays, 369
Insecticides, 451
Insects, 675
Integrated control, 115, 657
Integrated disease management, 229
Integrated mite management, 637
Integrated pest management (IPM), 223
Intra-specific competition, 407
Inverse sampling, 621
Irish potato, 465
Irritation, 723

Keiferia lycopersicella, 283

Larval performance, 121
Leaf-hoppers, 763
Leek, 641
Legume pod borer, 753
Lepidoptera, 121, 311
Lirimyza spp., 763
Lolium rigidum, 539
Lupin, 539

Madagascar, 579
Maize, 311
Malawi, 289
Mancozeb, 637
Marasmia patnalis, 121
Maruca vitrata, 753
Mating disruption, 473
Medicago sativa, 727
Meligethes aeneus, 353
Meloidogyne spp., 433
Meriones, 247
Merodon equestris, 353
Methabenzthiazuron, 21
Methomyl, 283
Methyl anthranilate, 97
Microdochium nivale, 295
Microtus, 247
Microtus canicaudus, 727
Migration, 359
Mimicry, 97
Mites, 675
Modalities, 753
Monilinia fructicola, 681
MR formulation, 341
Multispectral radiometry, 135
Musa, 609
Myciorrhiza, 735
Mycosphaerella fijiensis, 609
Mycovellosiella phaseoli, 101
Myzus persicae, 9

N. virescens, 439
Narcissus (daffodil), 549
Nectarines, 681
Nectria galligena, 513
Neem, 603
Nematicides, 187
Neorantanenia, 289
Nephotettix spp., 359
Nilaparvata lugens, 359
Nitrogen allocation, 641
Non-sporulating fungus, 497
Nozzles, 147
Nuclear polyhedrosis virus, 241, 425
Nutrition, 159

Odocoileus virginianus, 575
Oilseed rape, 707
Onion, 205
Optimal twist angle, 153
Organic amendments, 223
Organic soils, 171
Oryza sativa, 649
Oscinella frit, 559
Ostrinia nubilalis, 465
Oviposition preference, 121
Oxadiazon, 21

Panonychus ulmi, 637
Paspalum conjugatum, 15
Passer domesticus, 143
Pasture management, 259
Patchiness, 407
Pathogens, 407
Peaches, 681
Peanut root-knot nematode, 433
Peat formulation, 715
Pegboard, 369
Penconazole, 27
Pendimethalin, 21
Perceptions, 327
Pest damage, 779
Pest management, 649, 779
Pest surveillance, 359
Pests, 407
Phaseolus vulgaris, 101
Phenology, 559
Phenylpyrrole, 529
Pheromones, 473
Phoma sp., 497
Phorate, 349
Photodynamic fungicide, 341
Phthorimaea operculella, 197
Phytophthora drechsleri, 423
Phytophthora parasitica, 735
Phytotoxicity, 451
Picea sitchensis, 451
Pirimiphos-methyl, 603, 637, 707
Plant density, 197
Plant growth regulation, 167
Plant powder, 289
Plant resistance, 311
Plantain, 609
Planting date, 439, 687
PLRV, 9
Plutella xylostella, 567
Pneumatic insect removal, 763
Population suppression, 657
Post-emergence, 21
Postharvest diseases, 799
Potato, 521
Powdery mildew, 229
Powdery mildew control, 341
Pre-plant, 21
Probability of detection, 375
Propane exploder, 575
Propiconazole, 91
Prostephanus, 289
Psila rosae, 349, 353
Pulegone, 461, 723
Pyralidae, 121
Pythium aphanidermatum, 423
Pythium arrhenomanes, 85
Pythium ultimum, 479

Radiation, 129
Rainfall, 657
Ramularia phaseoli, 101
Rejex-It, 97
Remote sensing, 135
Repellent, 723
Repellents, 143
Residues, 27, 675
Resistance identification, 753
Resistance parameters, 101
Resistant mutants, 615
Rhizobacteria, 479
Rhizoctonia solani, 715
Rhizopus stolonifer, 681
Rice, 461
Rice leaffolders, 121
Rice tungro virus disease, 359
Rodents, 247
Root colonization, 497
Root rot, 735
Root-knot nematode, 171

Rotation and tillage, 85
Rust, 179
Ryegrass, 539
Ryegrass interplant, 641

Sampling theory, 621
Sanitation, 223
Scirpophaga incertulas, 649
Scirpophaga innotata, 327
Scouting, 369
Scutellonema bradys, 187
Secondary spread, 439
Seed dressing zone, 275
Seed treatment, 275
Sequential-estimation sampling, 621
Shade, 15
Sigatoka diseases, 391
Simulated sampling, 375
Simulation, 353, 359
Simulation models, 153
Sitka spruce, 451
Sitophilus, 289
Slug, 77
Soil, 27, 423
Soil tillage, 295
Solarization, 423
Sorghum, 159
Sowing date, 179
Soybean, 63
Spatial pattern, 375, 621
Sphaerotheca fuliginea, 229
Spray, 567
Spray deposit distribution, 153
Spray drifts, 147
Spring oat, 687
Starch extrusion, 33
Starling, 723
Statistical modeling, 621
Steinernema carpocapsae, 567
Stem borer, 327
Stem borer injury, 335
Sterol biosynthesis inhibitor, 615
Store, 197
Streptomyces, 735
Sturnus vulgaris, 723
Sugar beet, 479
Sugarcane, 505
Sunflower, 307
Systemic fungicides, 49

Talaromyces flavus, 115
Tannins, 159
Terrestrial invertebrates, 579
Thielaviopsis basicola, 735
Thiophanate-methyl, 637
Thresholds, 383
Tillage, 223
Tolerance, 159
Tomato, 283
Tomato fruits, 699
Tomato pinworm, 283
Toxicity, 247
Transgenic grop, 539
Triazole fungicides, 39
Trichoderma, 615, 735
Trichoderma viride, 633
Tungro, 439

Ultraviolet radiation, 129

Vacuuming, 763
Verticilium dahliae, 115
Vole control, 727

Watering frequency, 15
Watermelon, 423
Weed competition, 205
Weed control, 171, 205, 641
Weed seed production, 63
Weediness, 179
Weeds, 121, 407, 539
West Indies, 187
Wheat, 69, 77, 539
Wheat management, 295
White-tailed deer, 575
Whitegrubm 505
Wild *Vigna*, 753
Winter cover crop, 55
Winter crops, 259
Winter wheat, 383, 687
Wireworms, 521
Witches' broom, 743

Yam, 187
Yellow stem borer, 335, 649
Yield loss modeling, 135

Zanthoxylum zanthoxyloides, 603